APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/207,130	12/08/1998	DANIEL VIERA CONRAD	RA9-98-053	6377

25299   7590   05/22/2003

IBM CORPORATION
PO BOX 12195
DEPT 9CCA, BLDG 002
RESEARCH TRIANGLE PARK, NC 27709

EXAMINER
ROBINSON BOYCE, AKIBA K

ART UNIT	PAPER NUMBER
3623	

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>21 March 2003</u> .

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-15</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-15</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

     If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a) ☐ All b) ☐ Some * c) ☐ None of:

         1. ☐ Certified copies of the priority documents have been received.

         2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

     a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)   4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)   5) ☐ Notice of Informal Patent Application (PTO-152)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .   6) ☐ Other: .

DETAILED ACTION

Status of Claims

1.   Due to communications filed 1/21/03 and 3/21/03, the following is a non-final

office action. Claims 1-15 are pending in this application and have been examined on

the merits. Claims 1, 7, 8, 14 and 15 have been amended. The previous rejection has

been withdrawn, and the following rejection reflects the pending claims as amended.

Continued Examination Under 37 CFR 1.114

2.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/21/03

has been entered.

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Binkley, et al (US Patent 5,088,033), in view of Weber (US Patent 5,812, 668).

As per claims 1, 2, 7, 8, 9, 14, 15, Binkley, et al discloses:

providing an emulation module interfacing directly with the operating system and

corresponding to the device/providing an emulation object interfacing directly with the

operating system and corresponding to the device /an emulation module interfacing

directly with the operating system and corresponding to the device/an emulation object

interfacing directly with the operating system and corresponding to the device (Col. 3,

lines 34-37, Col. 8, lines 62-68).

ensuring that the application will utilize the emulation module when the

application is executed on the development system/ensuring that the application will

utilize the emulation object.../means for ensuring.../wherein the application is capable of

utilizing the emulation module in lieu of the device.../emulating the interaction...(Col. 6,

line 66-Col. 7, line 4);

executing the application on the development system independently of the point

of sale system, wherein the emulation module and the application emulate the

interaction between the application and the device that occurs when the application is

executed on the point of sale equipment/wherein the application is executed on the

system, the emulation module and the application independently.../wherein the

application is executed on the development system, the emulation module and the

application emulate the interaction...(Col. 1, lines 60-62, Col. 1, line 66-Col. 2, line 1,

Col. 2, lines 9-19, Col. 7, lines 32-38, [where the examiner is interpreting the

"development system" and the "point of sale system" of the present invention to be

analogous to the "host system" and "target system" of Binkley, et al);

ensuring that the application adequately utilizes the emulation object...(Col. 2, lines 9-13);

modifying the application...(Col. 1, lines 11-14, Col. 2, lines 13-19).

allowing a developer to provide input...(Col. 50, lines 41-43);

providing the input to the application in a form expected...(Col. 51, lines 3-17).

Binkley, et al fails to teach the following, however, Weber discloses:

A point of sale environment/A point of sale system.../wherein the device is specialized for the point of sale equipment, (Col. 65, lines 54-63,w/ abstract, lines 1-11)

It would have been obvious to one of ordinary skill in the art for the device to be specialized for the point of sale equipment because the transactions that are being tested on a different computer in Weber (test gateway computer) are occurring in a pos environment. In this case, since transactions are occurring at a pos system, any device used at the pos must therefore be specialized or formatted to operate at the pos system.

As per claims 3, 10, Binkley, et al discloses:

wherein the application is platform independent...(Col. 58, line 46-Col. 59, line 10).

As per claim 5, 12, Binkley, et al discloses:

wherein the point of sale equipment includes a driver...(Col. 19, line 67-Col. 20, line 6).

As per claim 6, 13, Binkley, et al discloses:

wherein the emulation object emulates the driver and the device...(Col. 19, lines 11-15, Col. 19, line 67-Col. 20, line 6).

As per claims 4, 11, Binkley, et al fails to teach the following, however Weber discloses:

wherein the application is a JAVA application...(Col. 7, lines 15-17).
It would have been obvious to one of ordinary skill in the art to make the application and
the emulation object platform independent because in a computer environment,
applications are constantly being changed around and depending on these changes
and the needs of the user, the platforms will also need to change in order to fit the
environment. It would have been obvious to one of ordinary skill in the art to make the
application and the emulation object JAVA applications because JAVA is a common,
distributed programming language that is simple and is used for object-oriented
programming in the application development art.

Response to Arguments

5.   Applicant's arguments filed 1/21/03 have been fully considered but they are not
persuasive.

As per claims 1, 7, 8, 14 and 15, the applicant argues that the combination of
Binkley et al and Weber fails to disclose a method, system or computer readable
medium in which the emulation object is interfaced directly with the operating system or
one that is used to emulate an interaction between an application and a point of sale
system and that the emulation module used emulates devices that are particular to the
point of sale system. However, Binkley et al discloses that the host system receives
output I/O signals from the emulating processor in Col. 8, lines 62-66. Also in Col. 2,
lines 9-19, Binkley et al discloses that the emulating processor provides/receives its
output/input signals to/from the host system (performing emulation). Since the
emulating processor contains the emulation object during processing, then the host
system of Binkley et al, which serves as the operating system of the present invention,

is in direct communication with the emulation object during the I/O communication

described in Binkley et al. In addition, the combination of Binkley et al and Weber

discloses a system used to emulate an interaction between an application and a point of

sale system and that the emulation module used emulates devices that are particular to

the point of sale system. In Binkley et al, the pos is represented by the target system

since this is the system in which the application is being developed. The Weber

reference was combined with the Binkley et al reference to re-enforce that a pos

environment could specifically be utilized in this type of emulation environment. Weber

shows this pos environment where the test gateway is used with a generic pos system

for a merchant located at the actual pos system in order to verify the operation of the

actual pos system or remote transaction clearance system. In this system, transaction

responses that come from the gateway computer include configuration data that can be

used by the merchant-operated computer to configure itself to access a production

gateway computer. In this case, the production computer represents the pos system of

the present invention, the merchant-controlled computer represents the development

system of the present invention, the simulated transaction responses that include

configuration data for the merchant-controlled computer represent the emulation

element and the test gateway computer represents the emulation environment. In both

Binkley et al and Weber, specialized devices can be interfaced with the systems via the

peripheral interfaces disclosed in both patents. Since peripheral interfaces are

disclosed in Weber, and Weber also discloses a pos environment, then it is obvious to

conclude that the peripheral devices should accommodate the environment and consist

of point of sale equipment.

Claims 2-6 depend from independent claim 1and are rejected for the same

reasons as discussed with respect to claim 1. Similarly, Claims 9-13 depend from

independent claim 8 and are rejected for the same reasons as discussed with respect to

claim 8.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to examiner Akiba Robinson-Boyce whose telephone

number is 703-305-1340. The examiner can normally be reached on Monday-Friday

8:30 am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Tariq Hafiz can be reached on 703-305-9643. The fax phone numbers for

the organization where this application or proceeding is assigned are 703-746-7238

[After final communications, labeled "Box AF"], 703-746-7239 [Official Communications],

and 703-746-7150 [Informal/Draft Communications, labeled "PROPOSED" or "DRAFT"].

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is 703-305-

3900.

A. R.-B.
May 20, 2003

TARIQ R. HAFIZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600